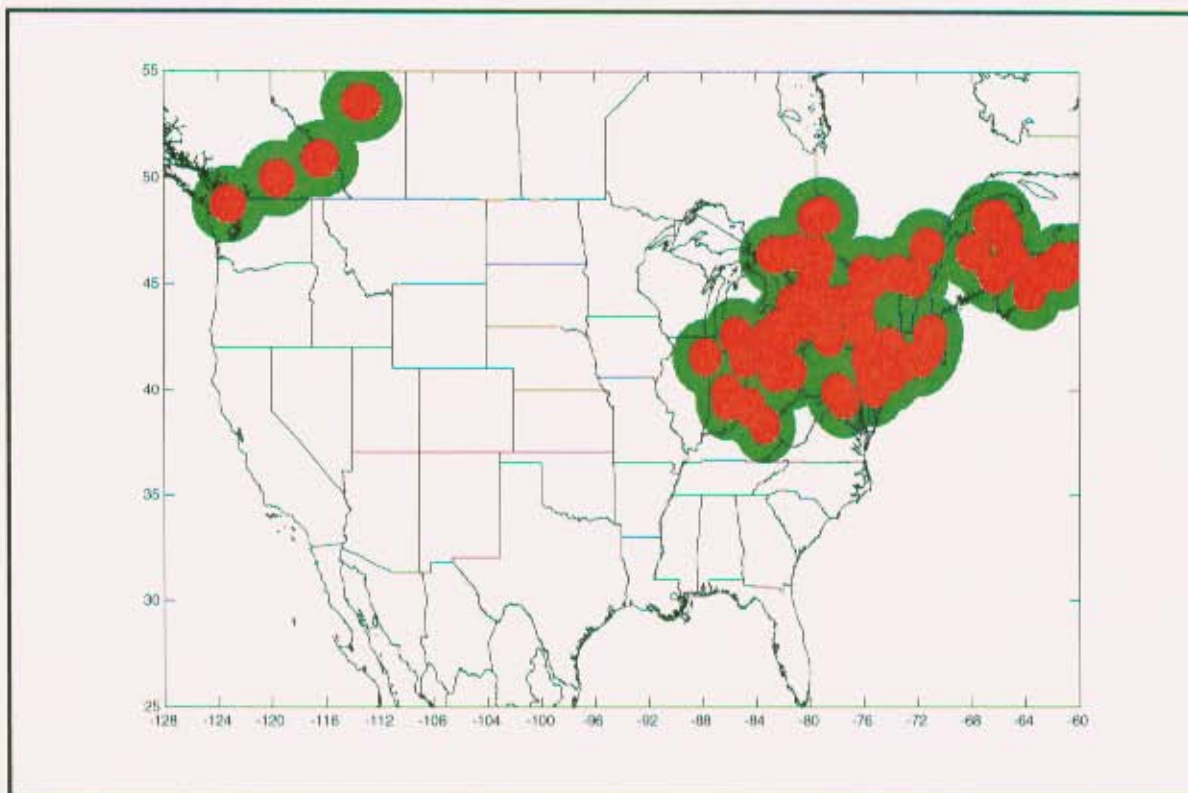


Note that the above impact distances are specific to this case, and are presented for illustrative purposes only. These distances can vary, and, in fact, impacts may be felt at much greater distances under certain circumstances.

## G. 700 MHz - AVAILABILITY IN THE CANADIAN BORDER REGIONS



**Figure G-1: TV/DTV Affecting Public Safety 700 MHz in the Canadian Border Regions**

Figure G-1 portrays 100- and 200-km impact regions surrounding existing operational primary-class analog television stations, along with protected primary-class<sup>1</sup> Canadian 700 MHz digital television allotments.

<sup>1</sup> Class A, B, C, D, N, R, S, VL, or VU

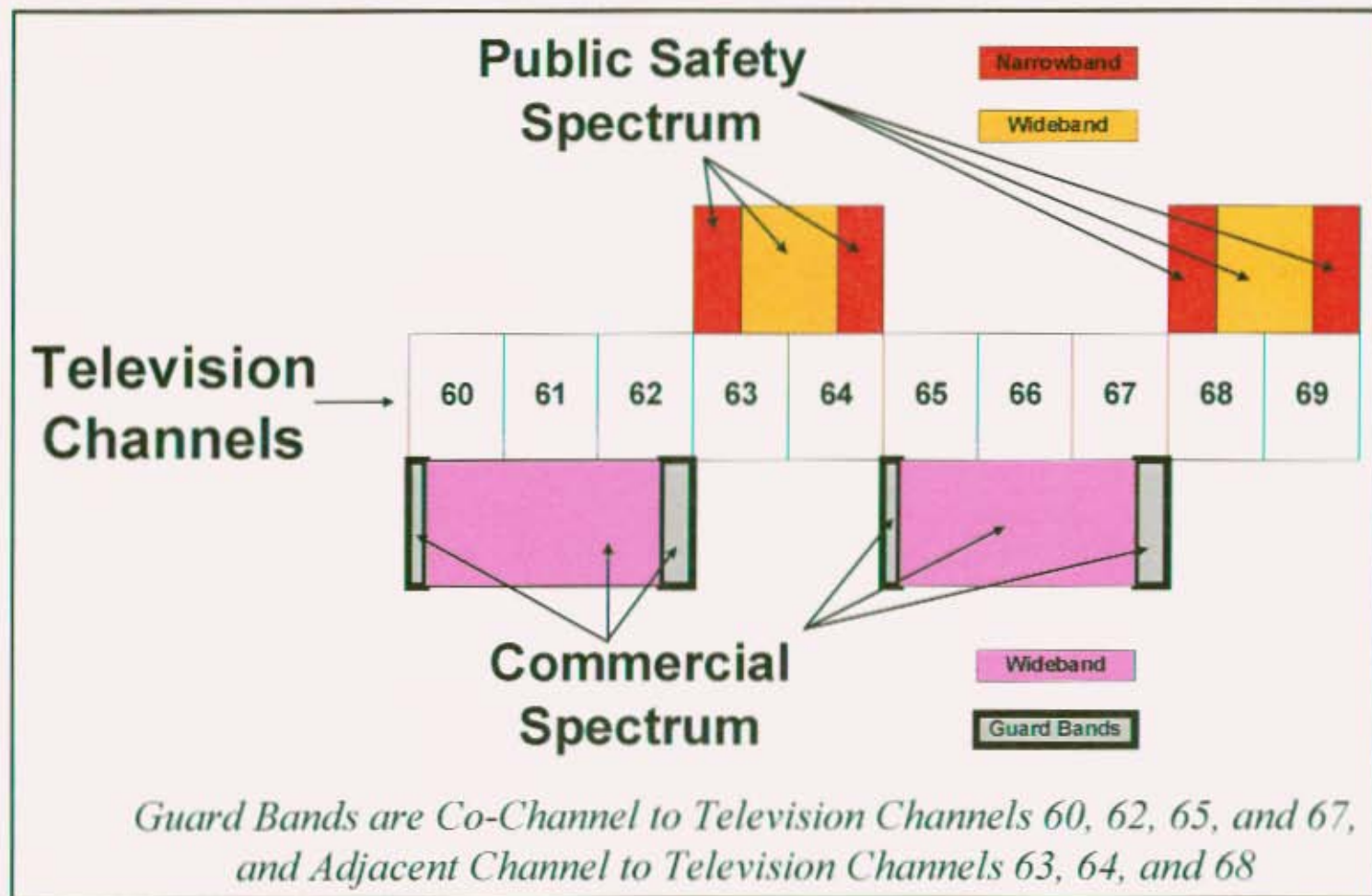


Figure G-2: The US 700 MHz Spectral Allocations

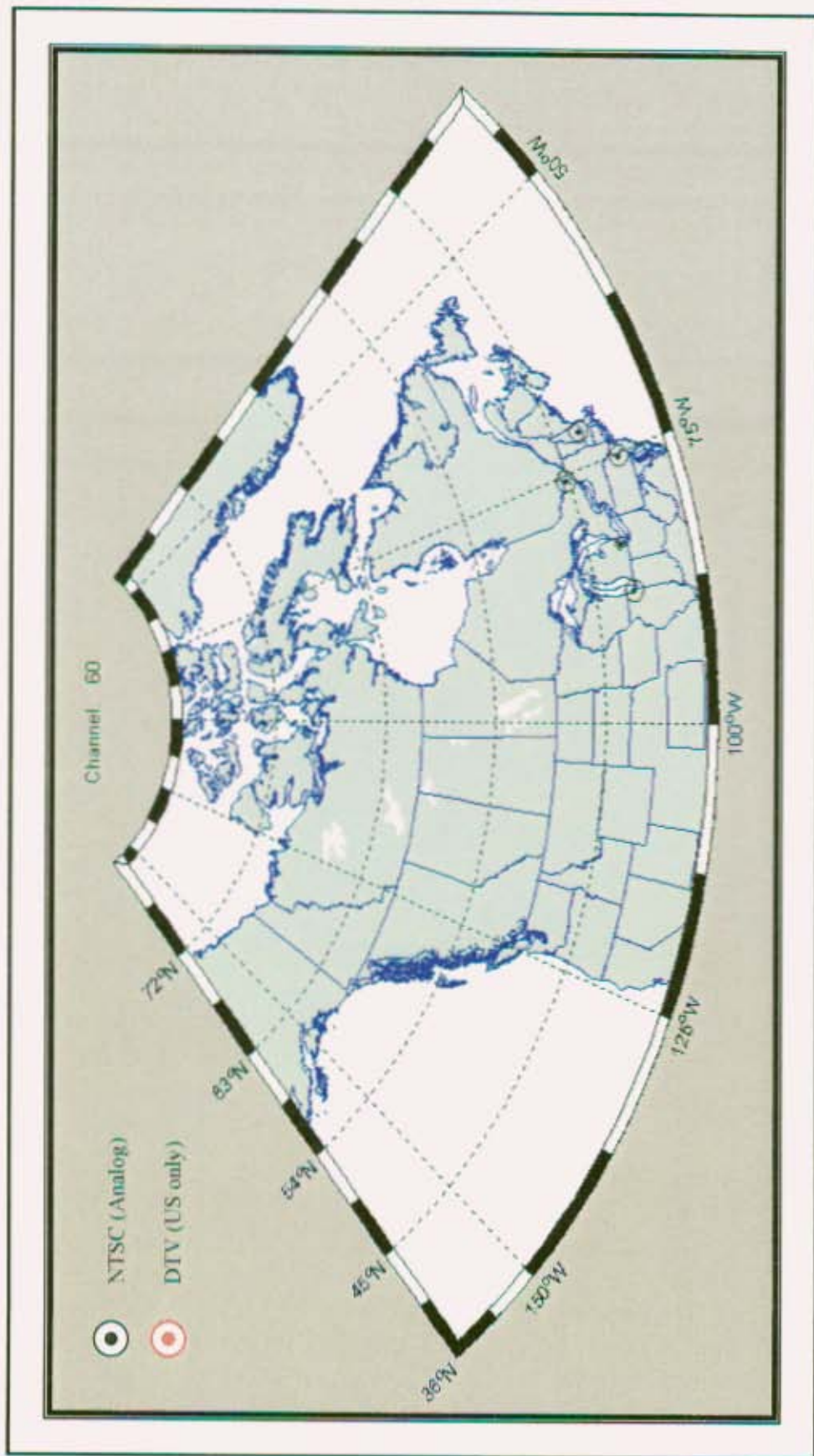


Figure G-3: US DTV, and Canadian Analog TV Affecting Guard Bands - Channel 60

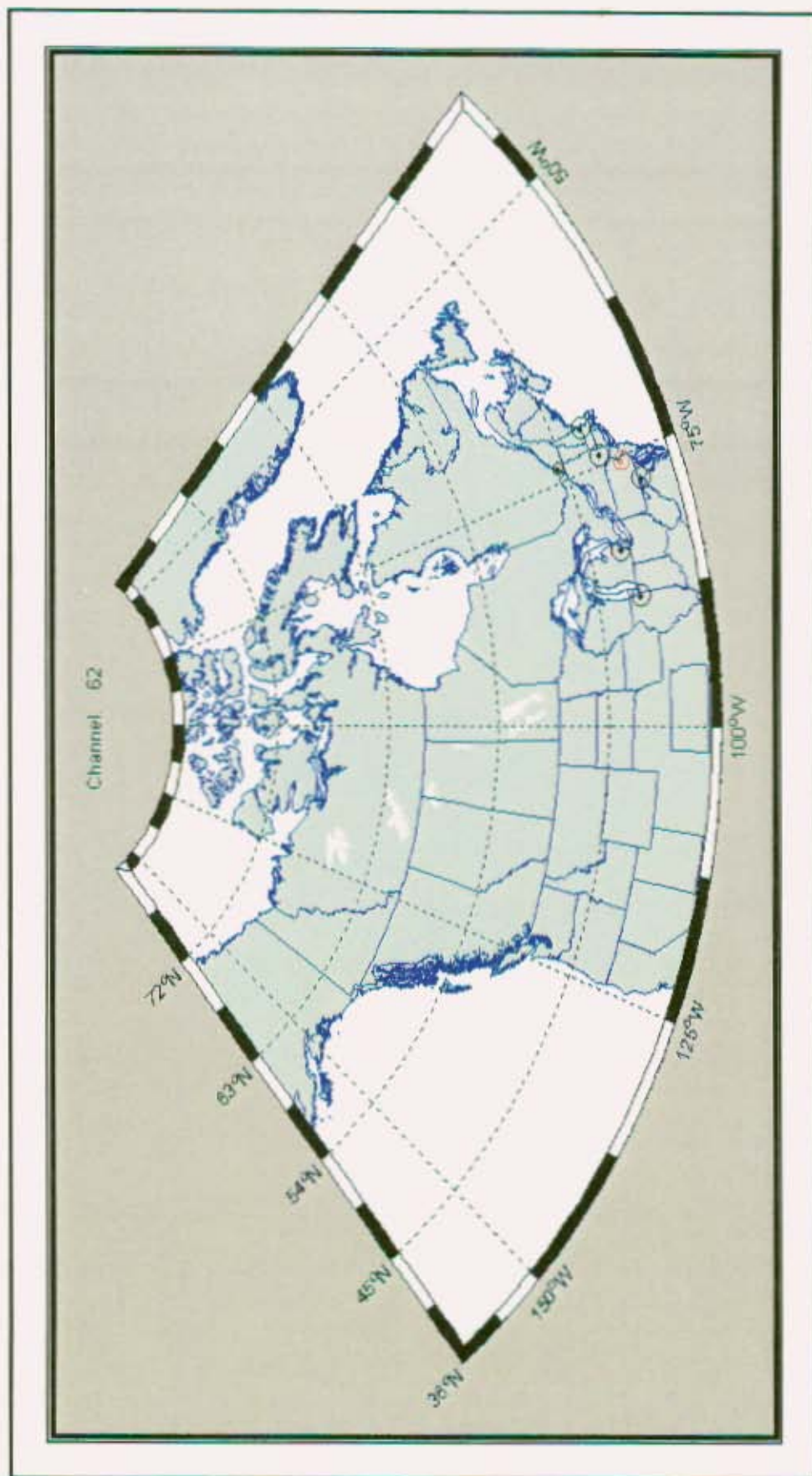


Figure G-4: US DTV, and Canadian Analog TV Affecting Guard Bands - Channel 62

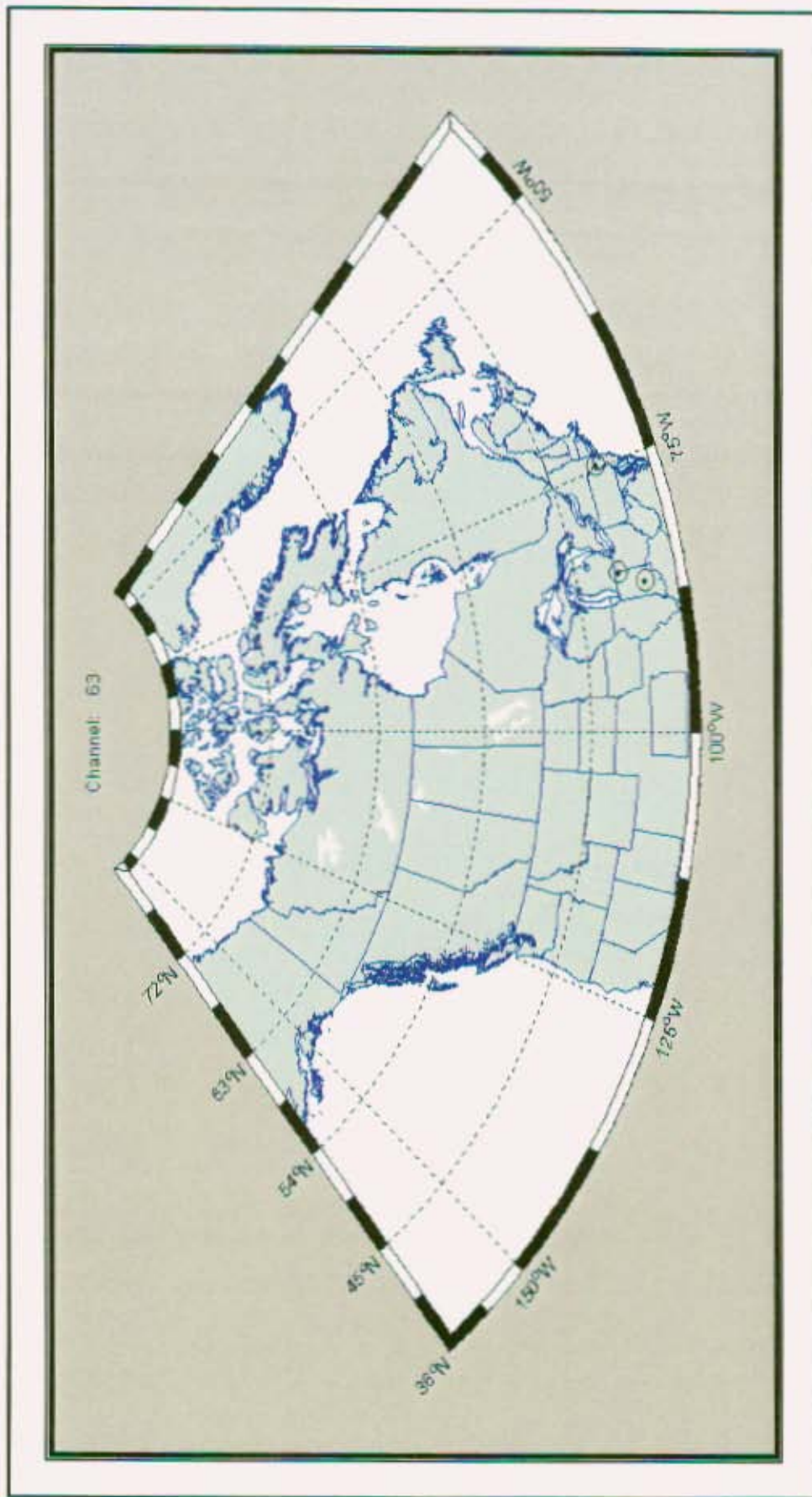


Figure G-5: US DTV, and Canadian Analog TV Affecting Guard Bands - Channel 63

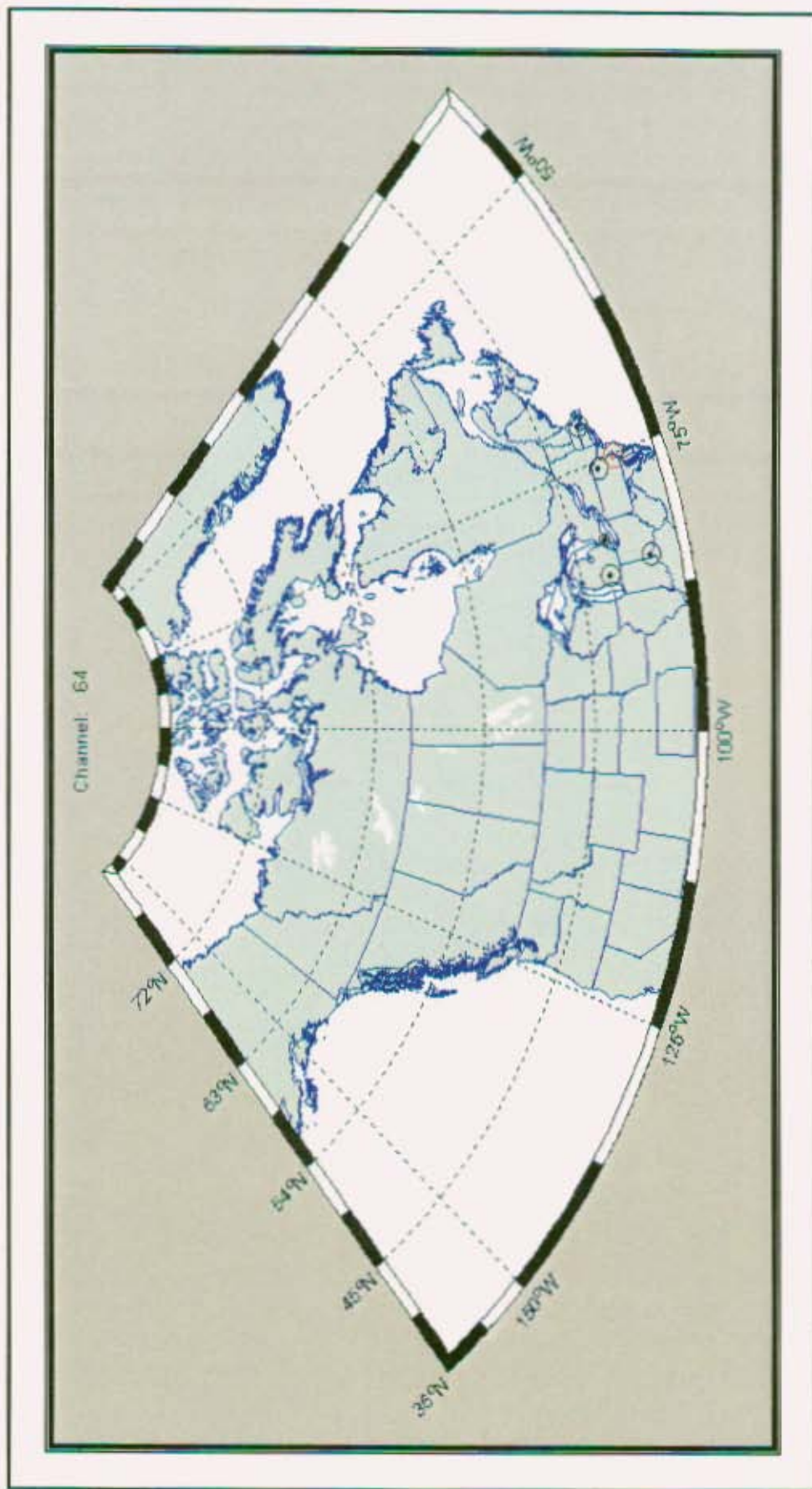


Figure G-6: US DTV, and Canadian Analog TV Affecting Guard Bands - Channel 64

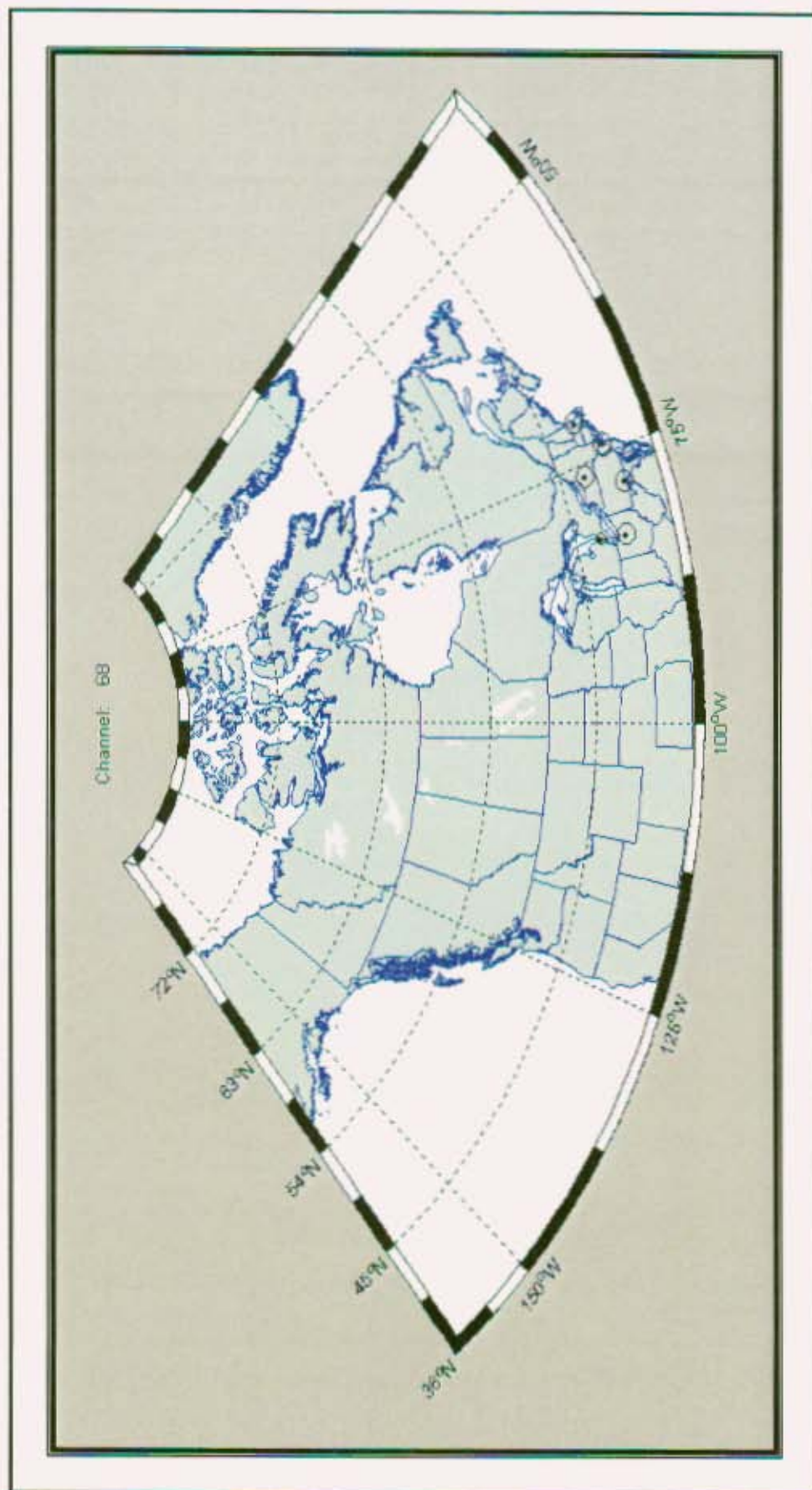


Figure G-9: US DTV, and Canadian Analog TV Affecting Guard Bands - Channel 68

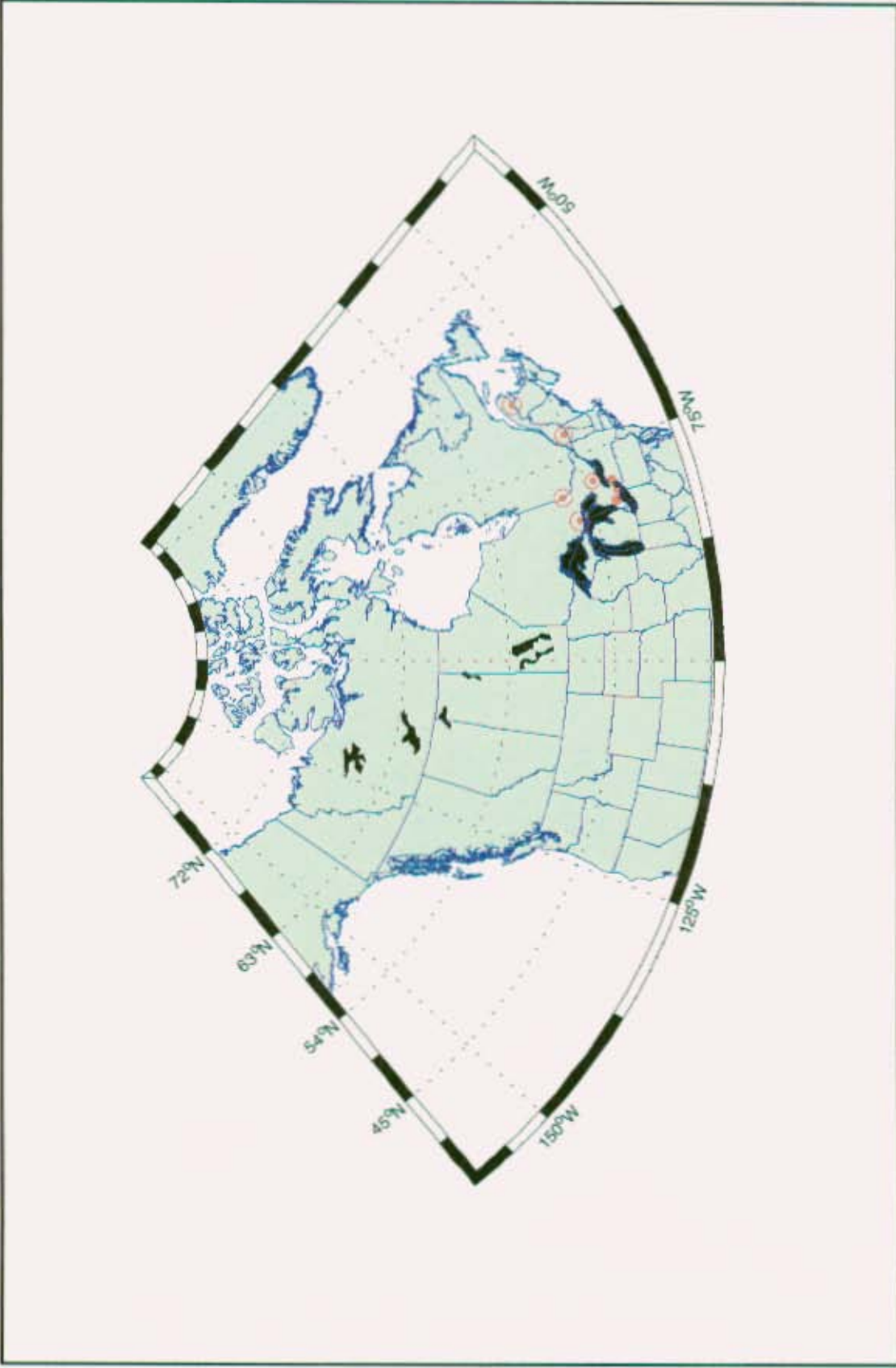


Figure G-10: Canadian DTV Affecting Guard Bands, with Protected Distances - Channel 60

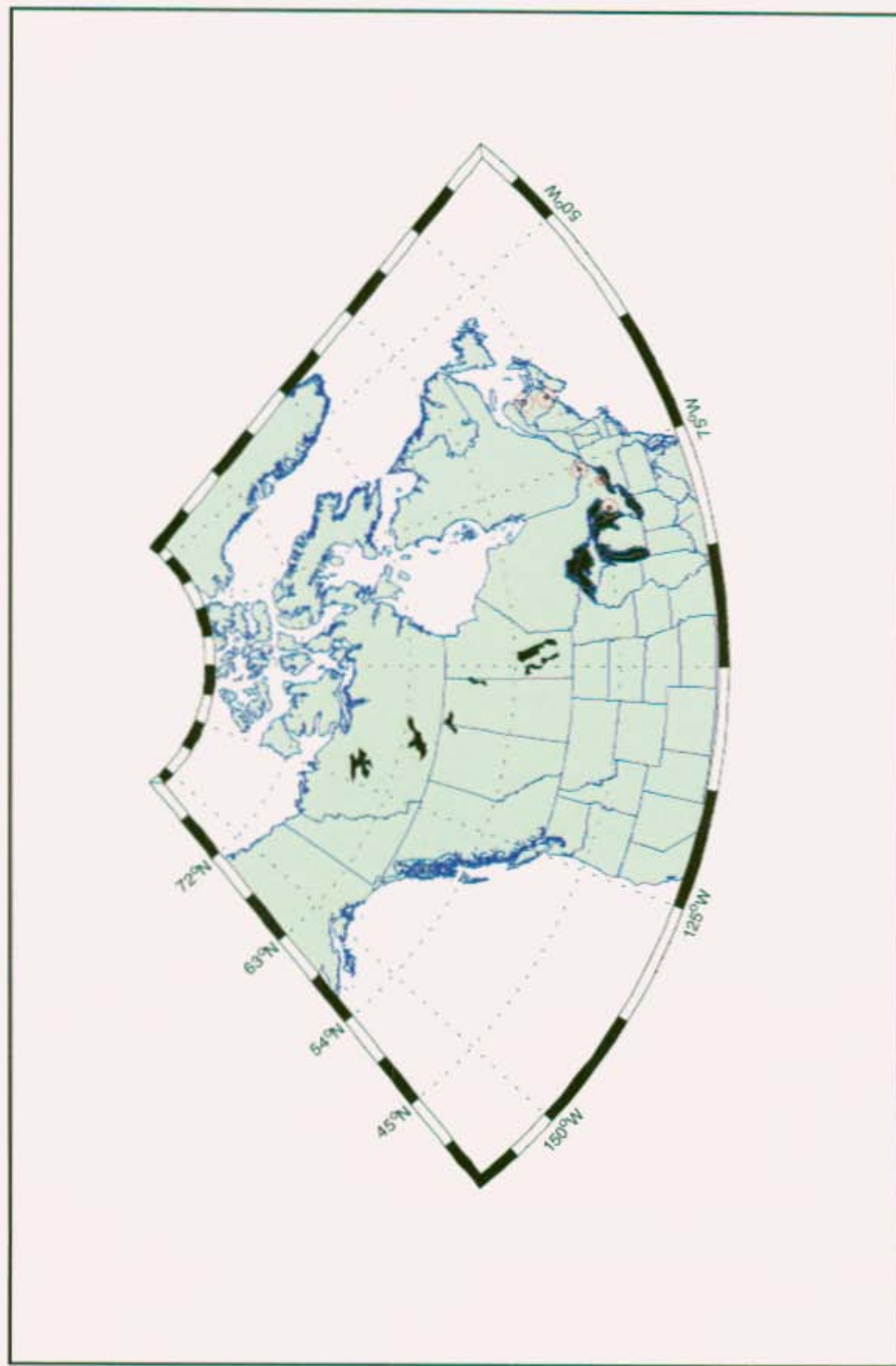


Figure G-11: Canadian DTV Affecting Guard Bands, with Protected Distances - Channel 62

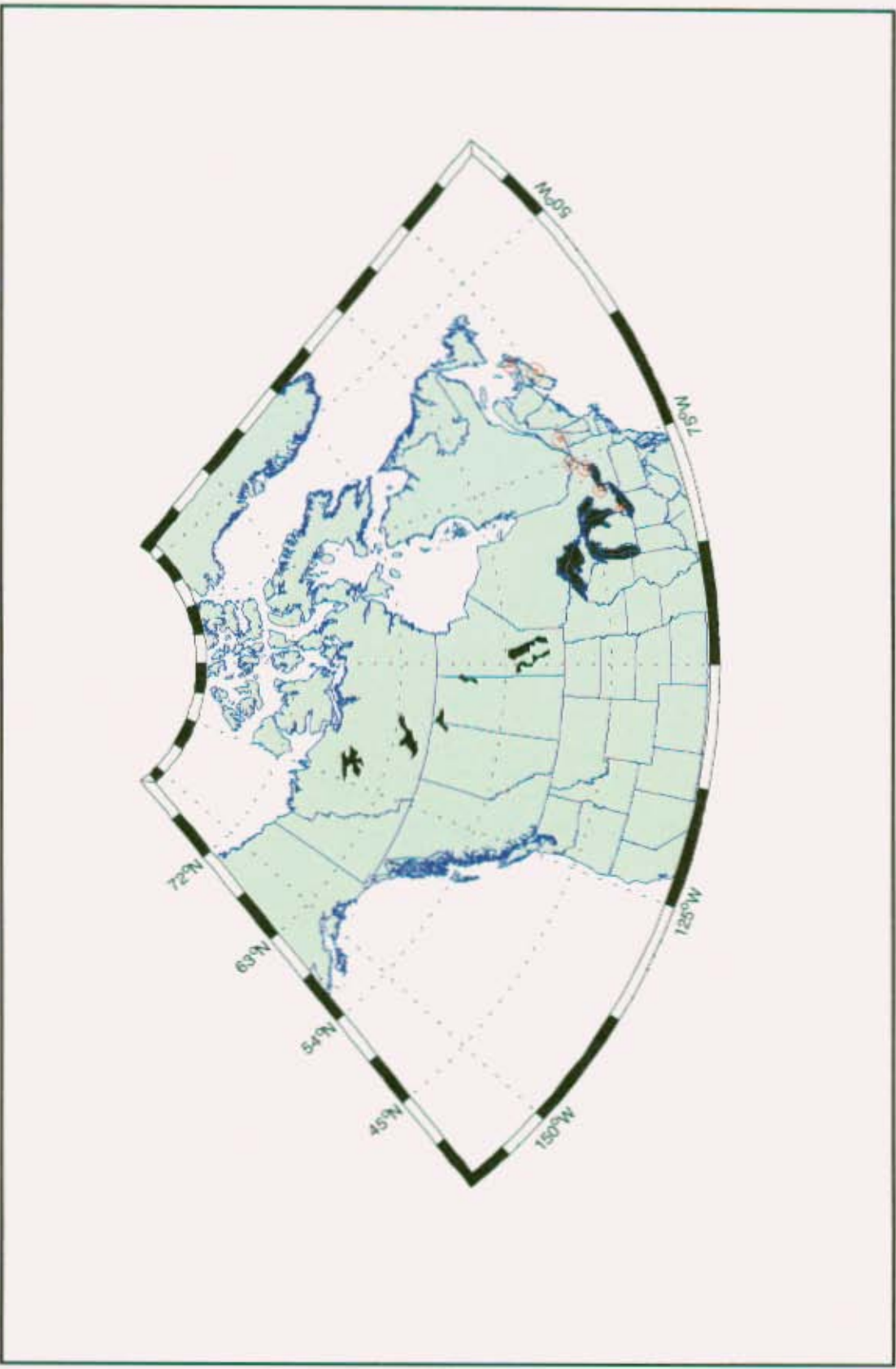


Figure G-12: Canadian DTV Affecting Guard Bands, with Protected Distances - Channel 63

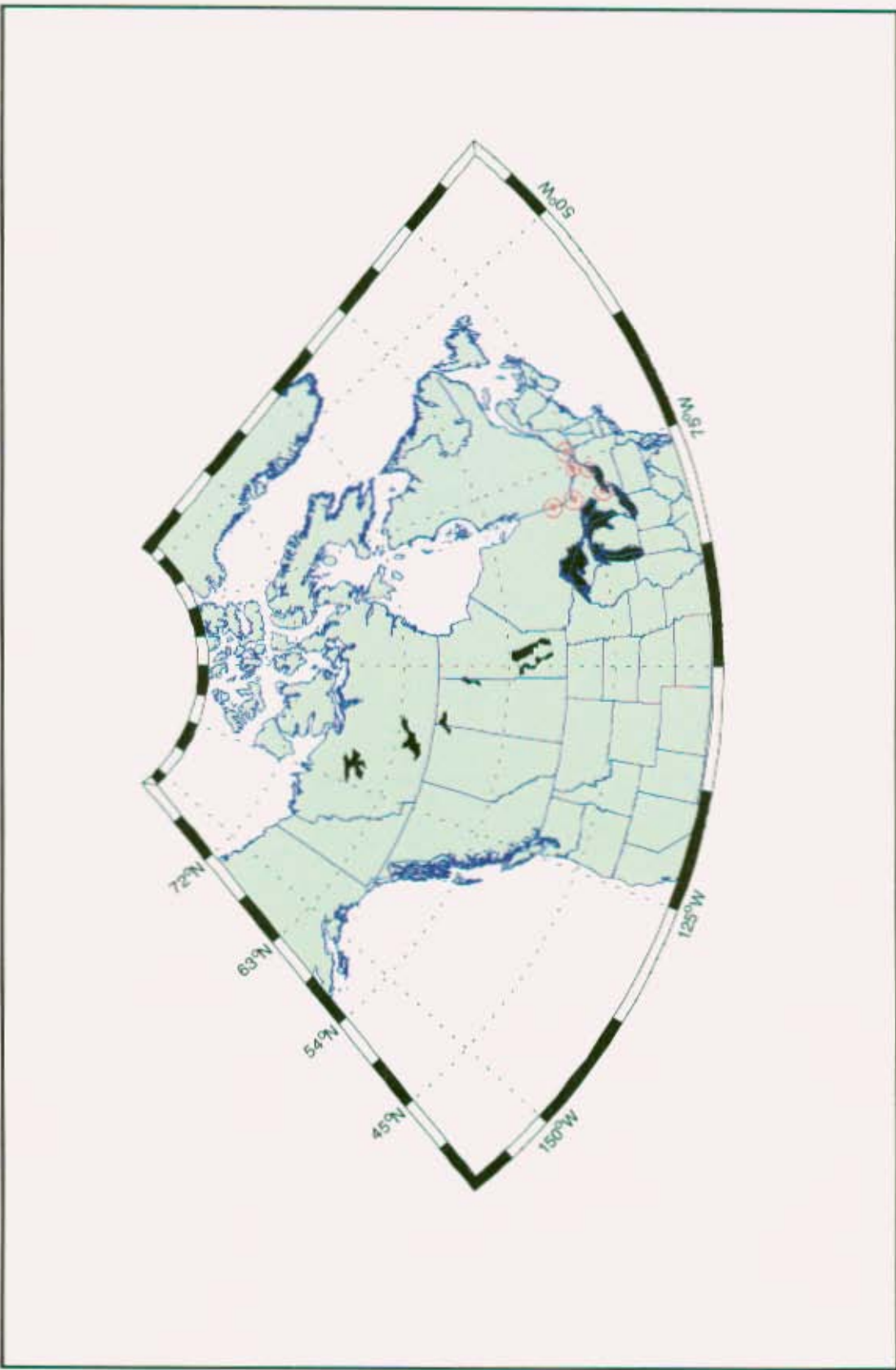


Figure G-13: Canadian DTV Affecting Guard Bands, with Protected Distances - Channel 64

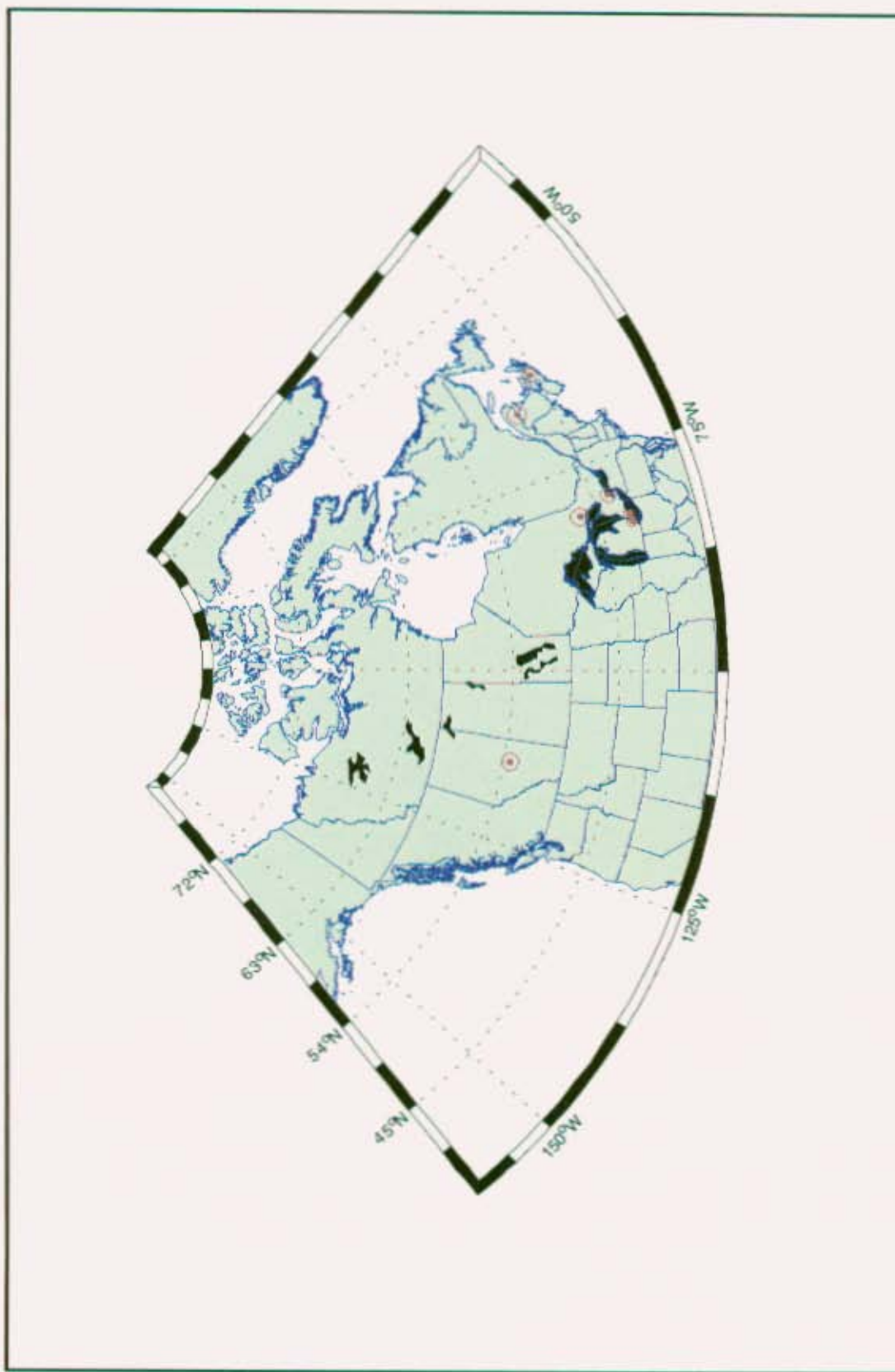


Figure G-14: Canadian DTV Affecting Guard Bands, with Protected Distances - Channel 65

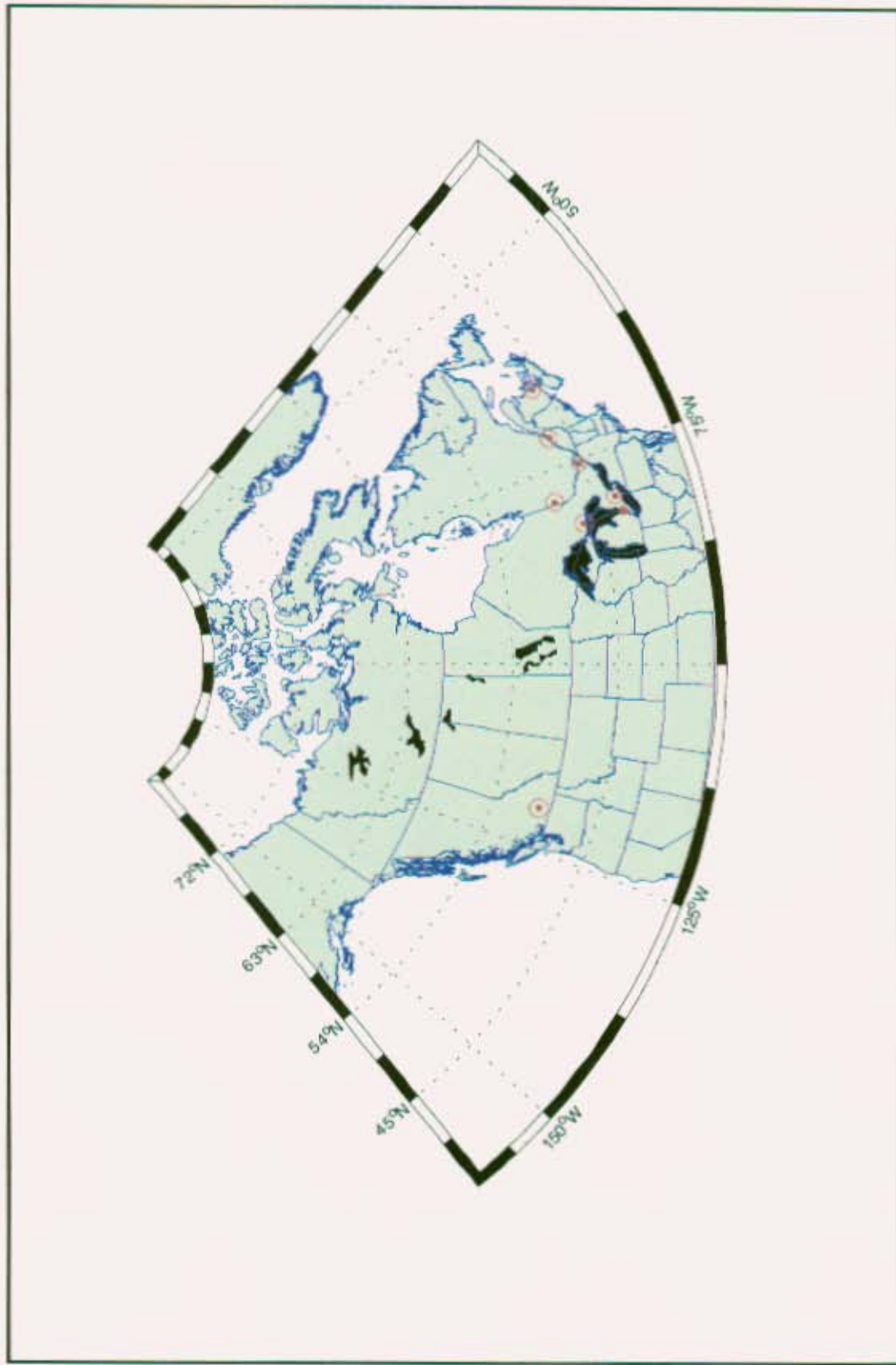


Figure G-15: Canadian DTV Affecting Guard Bands, with Protected Distances - Channel 67

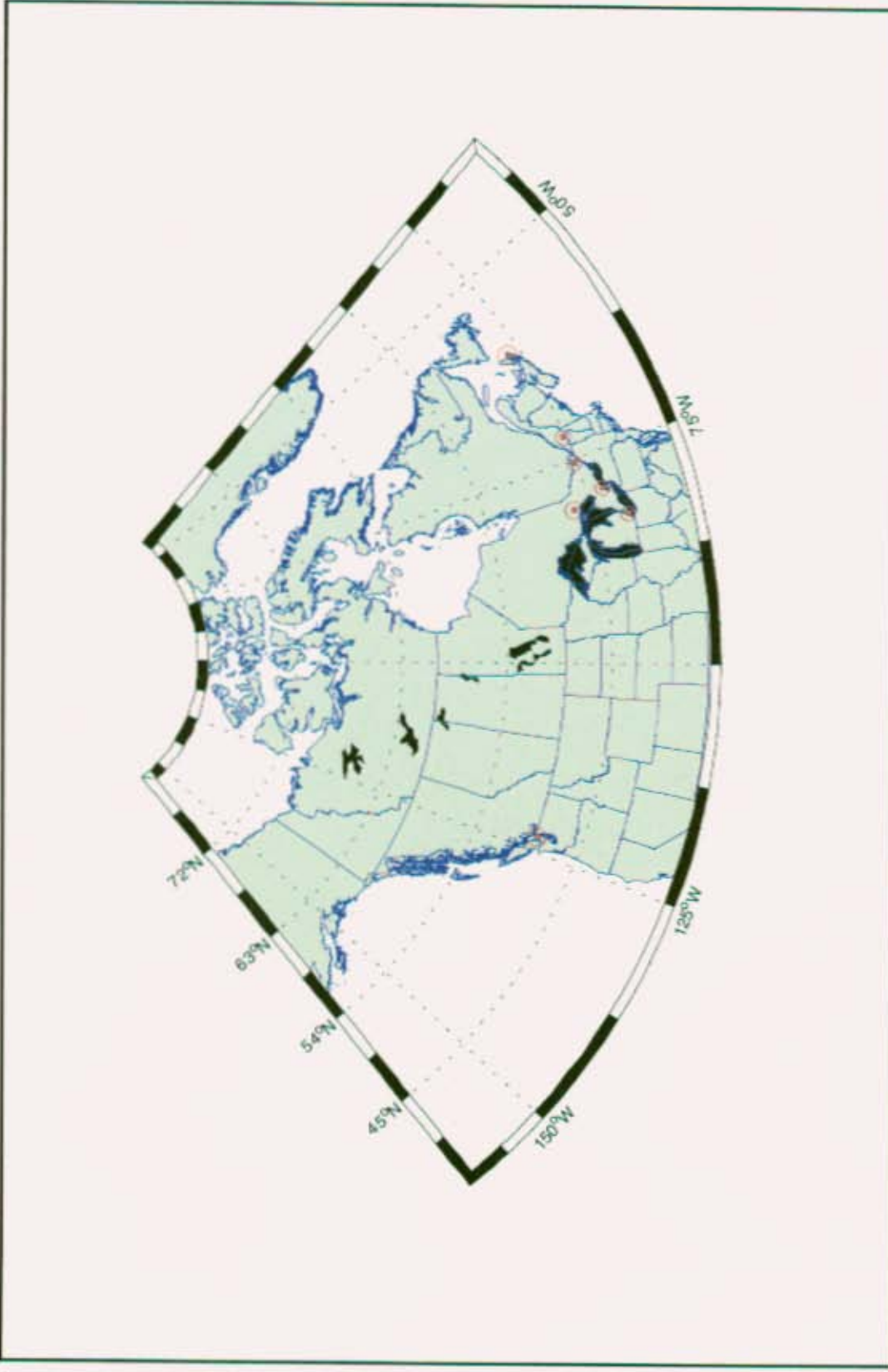


Figure G-16: Canadian DTG Affecting Guard Bands, with Protected Distances - Channel 6

H-1

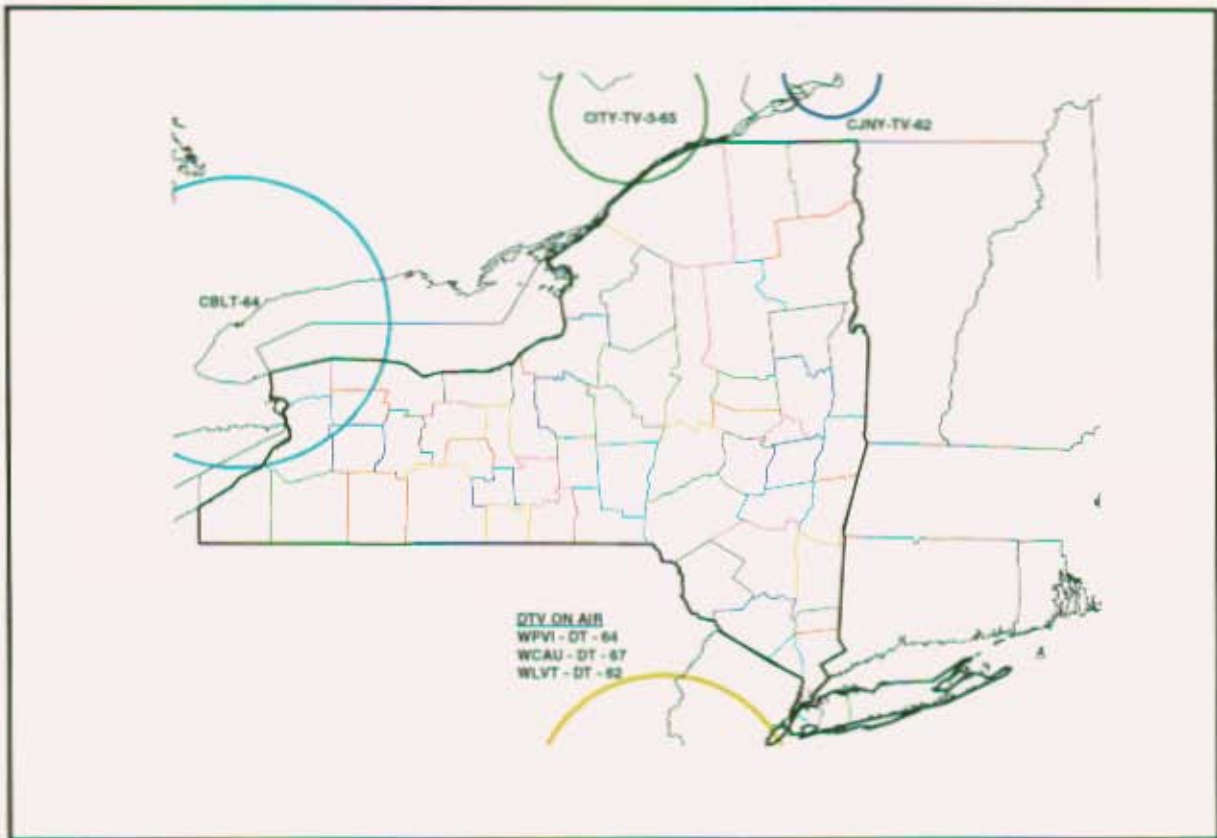


Figure H-2: Canadian Incumbent Analog Television, and US DTV Affecting New York State

## LMR Adjacent Spacing to TV 68 and 69

– Example WSYT Channel 68, 12 dB XPOL

### Channel 68 Grade B Contour (Red)

Adjacent channel mobiles (64/69) need to stay 12 km outside of contour

### 84 km Contour (Blue)

Adjacent LOS Receivers become desensitized

- 60 dB down from TV carrier (> 3 MHz separation)
- 12 dB of cross-polarization

Mobile service contours (Green fill) for bases within 84 km

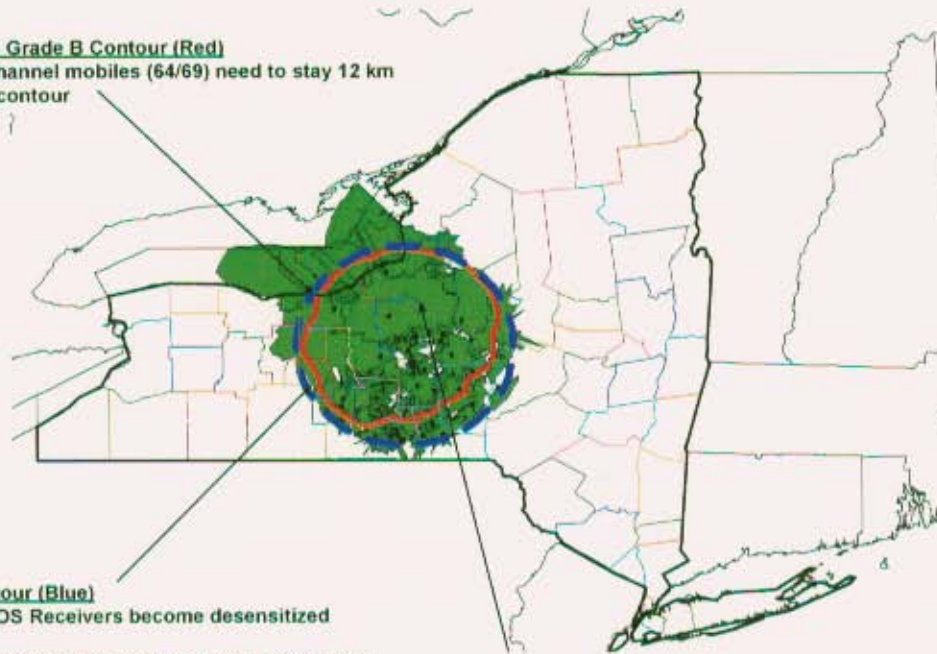


Figure H-3: Example of Adjacent Spacing to Television 68 and 69 - 12 dB Cross Polarization

## LMR Adjacent Spacing to TV 68 and 69

– Example WSYT Channel 68, 8 dB XPOL

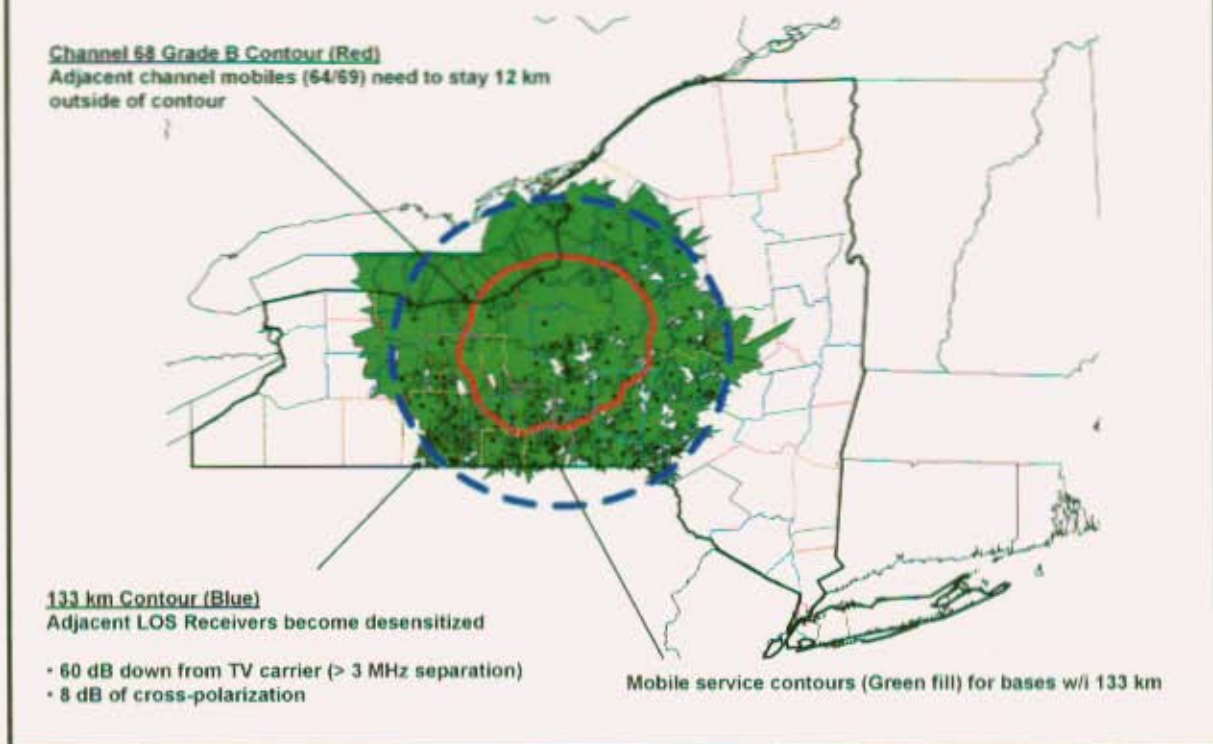


Figure H-4: Example of Adjacent Spacing to Television 68 and 69 - 8 dB Cross Polarization

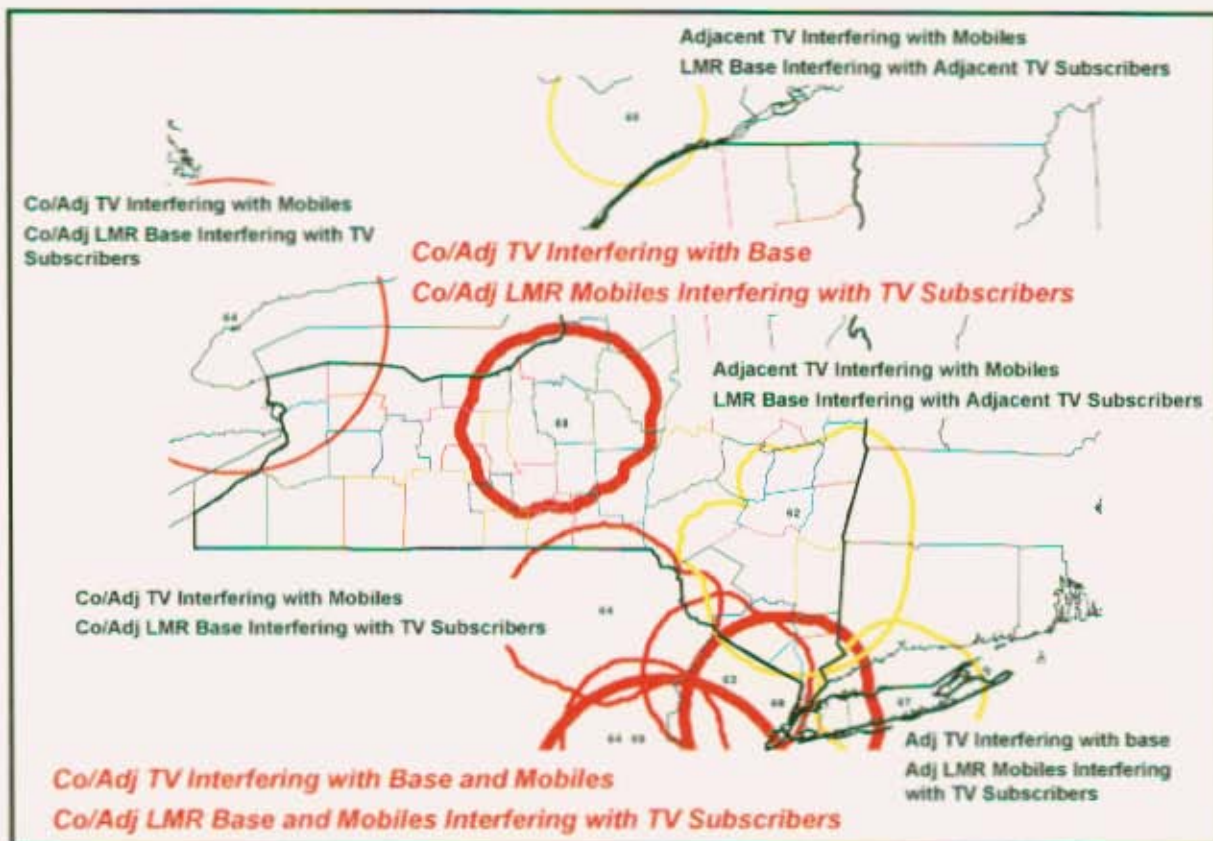


Figure H-5: Television Interference Mechanisms and Considerations

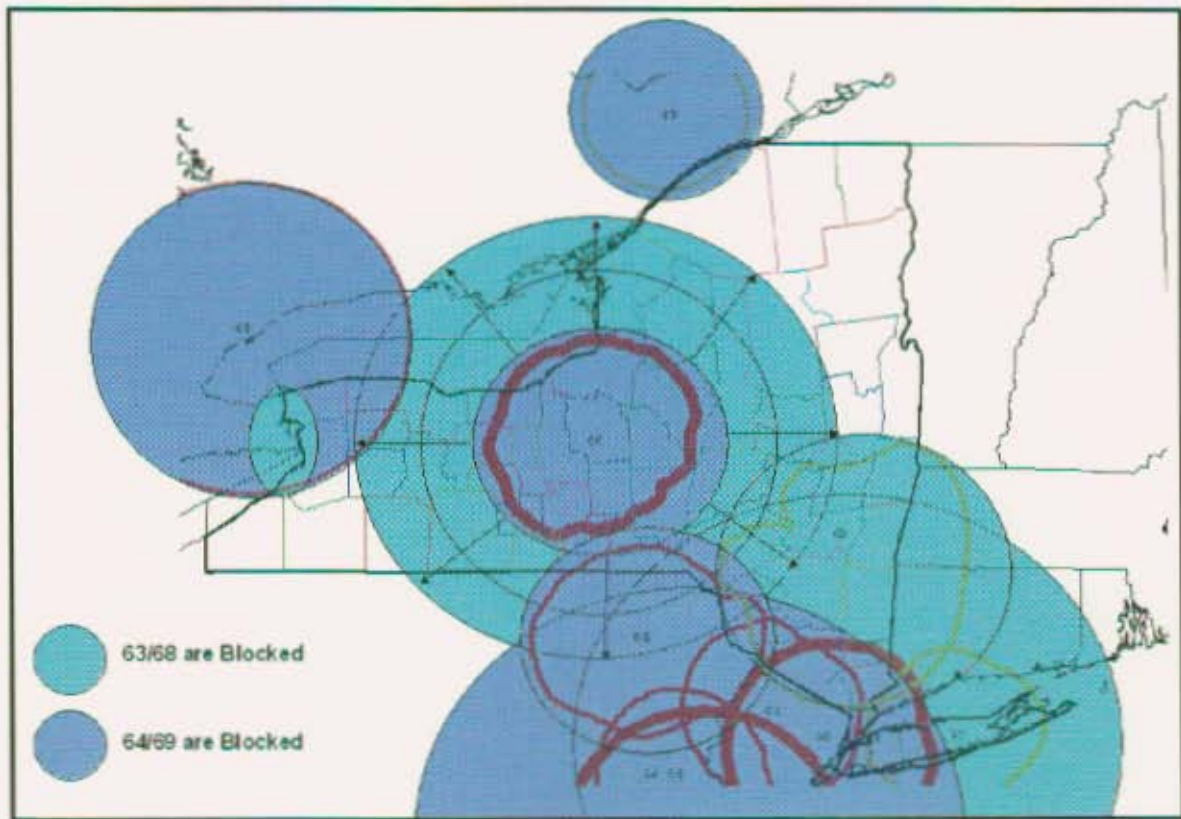


Figure H-6: Currently Blocked Channels in the Vicinity of New York State

## **I. PRESENTATION: 800 MHz AVAILABILITY IN NEW YORK**

The following documents the methodology that New York State used to investigate the availability of 800 MHz Public Safety spectrum within its borders. The approach taken here is most likely one of the most thorough, accurate, and advanced approaches to determining spectrum availability that have been applied to date.

### **800 MHz Spectrum Availability**

